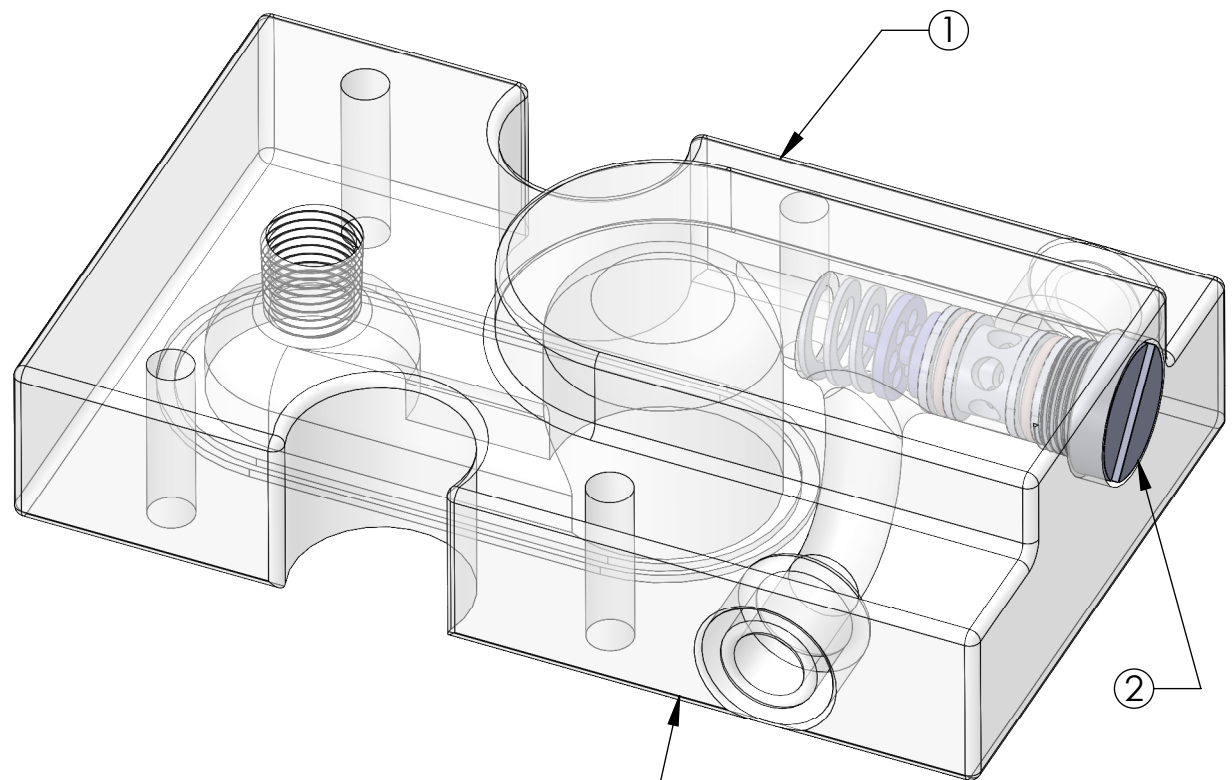




Smaller Printed Manifold

- Lower cost
- Can be printed by MBARI shop in clear material
- Can be printed by Paul Coenen in clear or black
- 5.5 x 3.25 x 1.5" _____

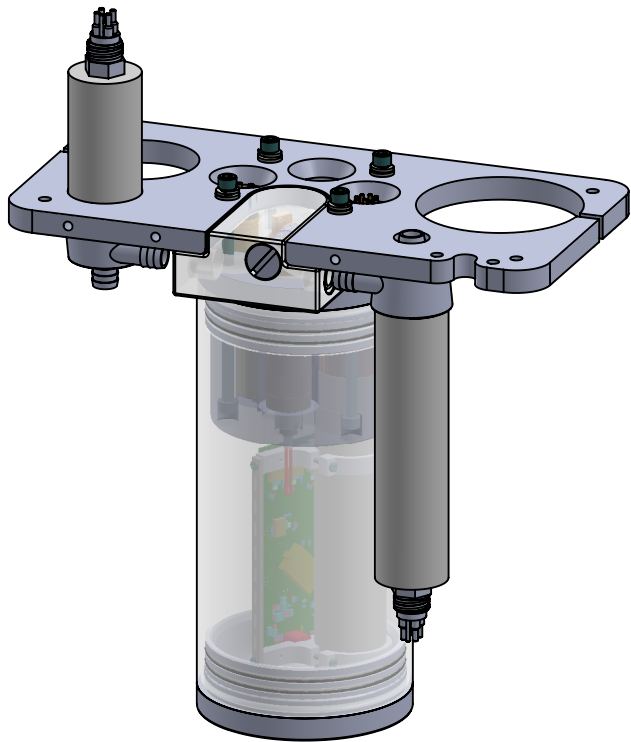
2	1		Valve retaining screw	Printed or machined
1	1		Mini mpHOx manifold	Printed Acrylic-like material
Item No.	Qty	Part No.	Description	Material Specification

Bill of Materials									
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE	
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	Designer Hans Jannasch 10/8/2021		jDesign Hans Jannasch 532 Herrmann Drive Monterey, CA 93940 jannasch@mac.com; 831-521-8425 mpHOx (mini printed flowcell) Concept	
Shop Foreman		1. DIMENSIONS ARE IN INCHES				CHECKED			
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .015-.030.				PROJECT			
NEXT ASSY Description	NEXT ASSY Number	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH MAX .012 INCHES FOR SINGLE SURFACE.							
Application		DO NOT SCALE DRAWING				WEIGHT		SIZE B	
								DWG. NO. 201jD-mpHox-miniPM-Concept	
								REV.	
						SCALE 1:3		CAD FILE:	
								SHEET 1 OF 2	

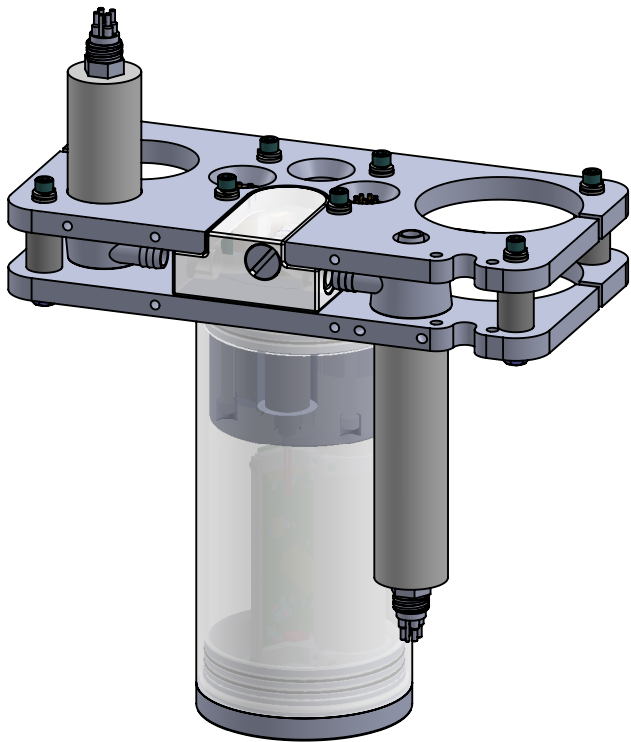
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		



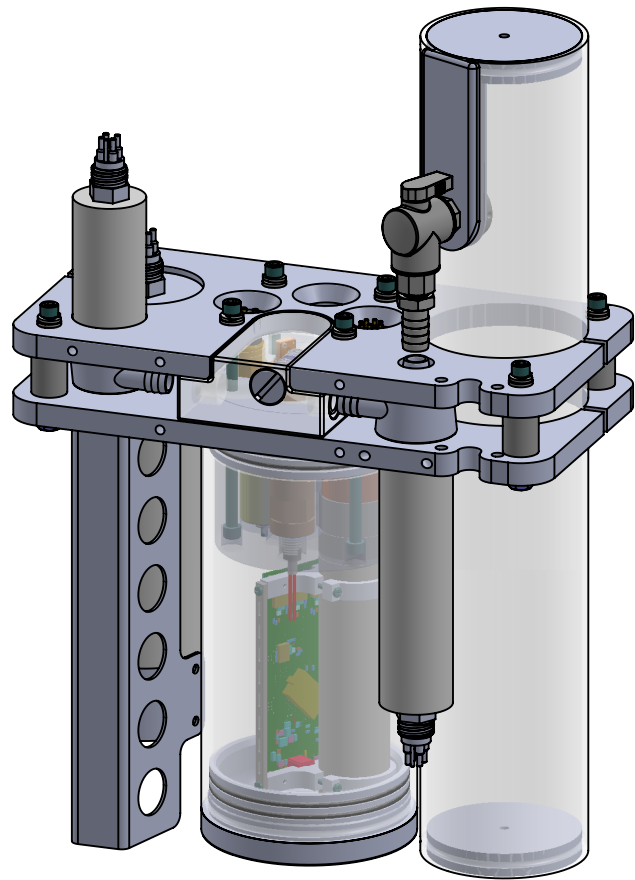
- Assembly:
- 1) Install valve in manifold
 - 2) Install top plate and manifold onto mpHOx controller



- Assembly:
- 3) Connect pump outflow ports to manifold w/ short 1/2" ID tubing
 - 4) Screw pumps into their encaps



- Assembly:
- 5) Slide on 2nd plate and secure w/ screws and 1" spacers (Pump impeller housings now securely held between plates)
 - 6) Install nylon-tipped setscrews to further secure pumps.



- Assembly:
- 7) Remove TBT from CTD outflow and install CTD with connecting tube
 - 8) Install TBT from CTD onto system outflow
 - 8) Fill and install Tris STD with short connection tube.

- NOTES:
- 1) A third plate could be added for rougher deployments
 - 2) A backplate would be added for mounting to a mooring line
 - 3) A cage would better protect the cables in rough environments

Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE		jDesign Hans Jannasch 532 Herrmann Drive Monterey, CA 93940 jannasch@mac.com; 831-521-8425 mpHOx (mini printed flowcell) Concept		
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	Designer	Hans Jannasch 10/8/2021					
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .015-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.				CHECKED						
Engineer						PROJECT						
NEXT ASSY Description	NEXT ASSY Number						SIZE B		DWG. NO. 201jD-mpHox-miniPM-Concept		REV.	
Application		DO NOT SCALE DRAWING				WEIGHT		SCALE 1:3		CAD FILE:	SHEET 2 OF 2	